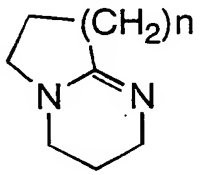
WHAT IS CLAIMED IS:

1. A catalyst composition for production of a polyurethane resin, which comprises a metal complex catalyst represented by the following formula (1):

$$M(acac)_n \qquad (1)$$

wherein M represents Mn, Fe, Co, Ni, Cu, Zn, Zr, Ti, Hf, Al or Th, acac represents acetylacetonate, and n is an integer of from 1 to 4, and at least one compound selected from the group consisting of a bicyclic tertiary amine compound represented by the following formula (2):



(2)

wherein n is an integer of from 1 to 3, a compound having a cumulative double bond, and a quaternary ammonium salt compound.

2. The catalyst composition for production of a polyurethane resin according to Claim 1, wherein the metal complex catalyst is at least one metal complex catalyst selected from the group consisting of manganese acetylacetonate, iron acetylacetonate, cobalt acetylacetonate, nickel acetylacetonate, zirconium acetylacetonate and titanium acetylacetonate.

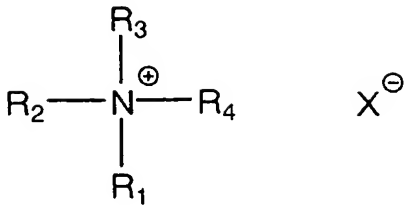
3. The catalyst composition for production of a polyurethane resin according to Claim 1, wherein the bicyclic tertiary amine compound is 1,8-

diazabicyclo[5,4,0]undecene-7 or 1,5-diazabicyclo[4,3,0]nonene-5.

4. The catalyst composition for production of a polyurethane resin according to Claim 1, wherein the compound having a cumulative double bond is at least one compound selected from the group consisting of an isocyanate, a ketene, an isothiocyanate, a carbodiimide and cumulene.

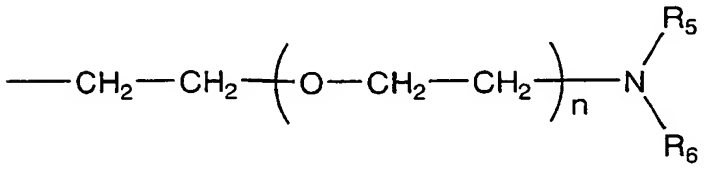
5. The catalyst composition for production of a polyurethane resin according to Claim 4, wherein the isocyanate is at least one compound selected from the group consisting of hexamethylene diioscyanate, hydrogenated dicyclohexylmethane diisocyanate, hydrogenated xylylene diisocyanate, isophorone diisocyanate, norbornane diisocyanate, 1,3-bis(isocyanate methyl)cyclohexane, L-lysine diisocyanate, 1,6,11-undecane triisocyanate, toluene diisocyanate, diphenylmethane diisocyanate, naphthylene diisocyanate and xylene diisocyanate.

6. The catalyst composition for production of a polyurethane resin according to Claim 1, wherein the quaternary ammonium salt compound is a quaternary ammonium salt compound represented by the following formula (3):



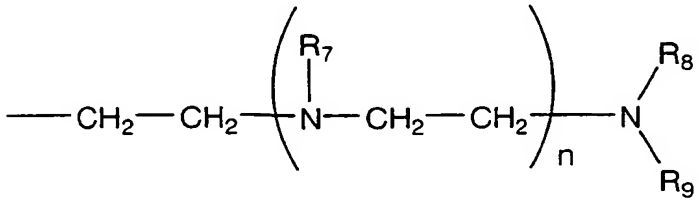
(3)

wherein each of R_1 to R_4 which are independent of one another, is a C_{1-18} alkyl group, a C_{1-18} aryl group, a C_{1-12} hydroxyalkyl group, a C_{1-12} aminoalkyl group, a C_{1-12} monomethylaminoalkyl group, a C_{1-12} dimethylaminoalkyl group, a group represented by the following formula (4):



(4)

wherein each of R_5 and R_6 which are independent of each other, is a C_{1-4} alkyl group, and n is an integer of from 0 to 5, or a group represented by the following formula (5):



(5)

wherein each of R_7 to R_9 which are independent of one another, is a C_{1-4} alkyl group, and n is an integer of from 0 to 5, any two among R_1 to R_4 may form a heterocyclic ring via carbon, nitrogen or oxygen atom(s), and X represents an organic acid group or an inorganic

acid group.

7. The catalyst composition for production of a polyurethane resin according to Claim 6, wherein in the formula (3), the quaternary ammonium is at least one compound selected from the group consisting of tetramethylammonium, methyltriethylammonium, ethyltrimethylammonium, butyltrimethylammonium, hexyltrimethylammonium, octyltrimethylammonium, decyltrimethylammonium, dodecyltrimethylammonium, tetradecyltrimethylammonium, hexadecyltrimethylammonium, octadecyltrimethylammonium, (2-hydroxypropyl)trimethylammonium, hydroxyethyltrimethylammonium, 1-methyl-1-azania-4-azabicyclo[2,2,2]octanium, and 1,1-dimethyl-4-methylpiperidinium.

8. The catalyst composition for production of a polyurethane resin according to Claim 6, wherein in the formula (3), X is at least one member selected from the group consisting of a formic group, an acetic group, an octylic group, a methyl carbonic group, a halogen group, a hydroxyl group, a hydrogen carbonic group and a carbonic group.

9. The catalyst composition for production of a polyurethane resin according to Claim 1, wherein the blend ratio of the metal complex catalyst (A) represented by the formula (1) to at least one compound (B) selected from the group consisting of the bicyclic tertiary amine

compound represented by the formula (2), the compound having a cumulative double bond, and the quaternary ammonium salt compound is (A)/(B)=20 to 0.05 (molar ratio).

10. A method for producing a polyurethane resin, which comprises reacting a polyol with an organic polyisocyanate in the presence of the catalyst composition for production of a polyurethane as defined in Claim 1, as a catalyst.

11. A method for producing a polyurethane resin, which comprises reacting a polyol with an organic polyisocyanate in the presence of the catalyst composition for production of a polyurethane as defined in Claim 1, as a catalyst, and additives.

12. The method for producing a polyurethane resin according to Claim 10, wherein the catalyst is used in an amount of from 0.001 to 20 parts by weight per 100 parts by weight of the polyol.